

AMENDMENTS TO THE CLAIMS

Please cancel claims 7-8, 20, 85, 91, and 93, amend claims 1, 71, 86-90, and 92, and add new claims 94-111 as follows:

1. (Currently Amended) In a computer-implemented animation system, a method for animating an object, the method comprising:

receiving a first input, the first input specifying a first parameter behavior, the first parameter behavior indicating how to change a value of a first parameter over time, wherein the first parameter applies to one element of a group consisting of a ~~motion behavior applied to the object~~, a filter applied to the object[[,]] and a generator applied to the object;

animating the object by changing the value of the first parameter over time according to the specified parameter behavior; and

outputting the animated object.

2. (Original) The method of claim 1, wherein the object comprises a two-dimensional object.
3. (Previously Presented) The method of claim 1, further comprising receiving a second input, the second input specifying a parameter keyframe indicating the value for the first parameter at a first point in time, and wherein animating the object comprises changing the value of the first parameter according to the specified parameter behavior and further according to the specified parameter keyframe.
4. (Previously Presented) The method of claim 1, further comprising receiving a second input, the second input specifying a second parameter behavior, the second parameter behavior indicating how to change a value of a second parameter over time, and wherein animating the object further comprises changing the value of the second parameter according to the second specified parameter behavior.

5.-8. (Cancelled)

9. (Previously Presented) The method of claim 1, wherein the first parameter behavior indicates that the value of the first parameter should be averaged over time.

10. (Previously Presented) The method of claim 1, wherein the first parameter behavior indicates that the value of the first parameter should be changed using a user-specified custom change.

11. (Previously Presented) The method of claim 1, wherein the first parameter behavior indicates that the value of the first parameter should be negated.

12. (Previously Presented) The method of claim 1, wherein the first parameter behavior indicates that the value of the first parameter should oscillate over time.

13. (Previously Presented) The method of claim 1, wherein the first parameter behavior indicates that the value of the first parameter should ramp over time.

14. (Previously Presented) The method of claim 1, wherein the first parameter behavior indicates that the value of the first parameter should be randomized.

15. (Previously Presented) The method of claim 1, wherein the first parameter behavior indicates that the value of the first parameter should change over time according to a specified rate.

16. (Previously Presented) The method of claim 1, wherein the first parameter behavior indicates that changes to the value of the first parameter should be executed in reverse order.

17. (Previously Presented) The method of claim 1, wherein the first parameter behavior indicates that the value of the first parameter should not change.

18. (Previously Presented) The method of claim 1, wherein the first parameter behavior indicates that the value of the first parameter should wriggle over time.

19. (Previously Presented) The method of claim 1, wherein the object comprises one from a group consisting of:

an image object;

a text object; and
a particle system.

20.-70. (Cancelled)

71. (Currently Amended) A method for animating an object using a behavior, comprising:

outputting an original animation for the object according to a first parameter behavior,
the first parameter behavior indicating how to change a value of a first parameter
over time, wherein the first parameter applies to a motion behavior applied to the
object;

concurrently with outputting the original animation[[,]]:

~~accepting user input that specifies a second parameter behavior, the second
parameter behavior indicating how to change a value of a second
parameter over time, wherein the second parameter applies to the same
motion behavior applied to the object~~

receiving a first user input, the first user input specifying a second parameter of
the motion behavior; and

receiving a second user input, the second user input specifying a second
parameter behavior, the second parameter behavior indicating how to
change a value of the second parameter over time; and

outputting an updated animation for the object according to the first parameter behavior
and further according to the second parameter behavior.

72.-73. (Cancelled)

74. (Original) The method of claim 71, wherein outputting the updated animation is performed
without interrupting the animation for the object.

75. (Previously Presented) The method of claim 71, wherein the updated animation reflects the application of the second parameter behavior in real-time.

76. (Original) The method of claim 71, wherein outputting the original animation and outputting the updated animation each comprise rendering a plurality of frames and caching the rendered frames.

77. (Original) The method of claim 71, wherein outputting the original animation and outputting the updated animation each comprise rendering each of a plurality of frames sequentially.

78. (Original) The method of claim 71, wherein outputting the original animation and outputting the updated animation each comprise rendering each of a plurality of frames sequentially by calculating a current frame based on a previous frame.

79. (Original) The method of claim 71, wherein outputting the original animation and outputting the updated animation each comprise rendering a plurality of frames and periodically caching a subset of the rendered frames in an interval cache.

80. (Original) The method of claim 71, wherein outputting the original animation and outputting the updated animation each comprise evaluating, by a first thread, a first subset of frames, and evaluating, by a second thread, a second subset of frames.

81. (Original) The method of claim 80, wherein the first subset and the second subset of frames each comprise alternate frames of the animation.

82.-85. (Cancelled)

86. (Currently Amended) In a computer-implemented animation system, a method for animating an object, the method comprising:

receiving a ~~first~~ an input, the ~~first~~ input specifying a ~~first~~ behavior, the ~~first~~ behavior indicating how to change a value of a ~~first~~ parameter of the object over time;

animating the object by changing the value of the ~~first~~ parameter of the object over time
according to the specified behavior; and

outputting the animated object;

wherein the ~~first~~ behavior comprises one from a group consisting of a Snap Alignment to Motion behavior and an Align to Motion behavior, each of which changes a rotation of the object based on a motion path of the object such that the rotation is not changed if the motion path is straight.

87. (Currently Amended) In a computer-implemented animation system, a method for animating an object, the method comprising:

receiving a ~~first~~ an input, the ~~first~~ input specifying a ~~first~~ behavior, the ~~first~~ behavior

indicating how to change a value of a ~~first~~ parameter of the object over time;

animating the object by changing the value of the ~~first~~ parameter of the object over time

according to the specified behavior; and

outputting the animated object;

wherein the ~~first~~ behavior comprises one from a group consisting of:

an Attracted To behavior, which changes a position of the object based on a position of a
second object while not affecting the position of the second object;

an Attractor behavior, which changes a position of a second object based on a position of
the object while not affecting the position of the object;

a Drift Attracted To behavior, which changes a position of the object based on a position
of a second object while not affecting the position of the second object; and

a Drift Attractor behavior, which changes a position of a second object based on a
position of the object while not affecting the position of the object.

88. (Currently Amended) In a computer-implemented animation system, a method for animating an object, the method comprising:

receiving a ~~first~~ an input, the ~~first~~ input specifying a ~~first~~ behavior to apply to the object,
the ~~first~~ behavior indicating how to change a value of a ~~first~~ parameter of the
object over time;
animating the object by changing the value of the ~~first~~ parameter of the object over time
according to the specified behavior; and
outputting the animated object;

wherein the ~~first~~ behavior comprises one from a group consisting of:

a Drag behavior, which changes a position of the object based on a simulated friction;
and
a Rotational Drag behavior, which changes a rotation of the object based on a simulated
friction.

89. (Currently Amended) In a computer-implemented animation system, a method for animating
an object, the method comprising:

receiving a ~~first~~ an input, the ~~first~~ input specifying a ~~first~~ behavior, the ~~first~~ behavior
indicating how to change a value of a ~~first~~ parameter of the object over time;
animating the object by changing the value of the ~~first~~ parameter of the object over time
according to the specified behavior; and
outputting the animated object;

wherein the ~~first~~ behavior comprises one from a group consisting of:

an Orbit Around behavior, which changes a position of the object based on a position of a
second object while not affecting the position of the second object; and
a Vortex behavior, which changes a position of a second object based on a position of the
object while not affecting the position of the object.

90. (Currently Amended) In a computer-implemented animation system, a method for animating [an] a first object, the method comprising:

receiving ~~a first~~ an input, the ~~first~~ input specifying a ~~first~~ behavior, the ~~first~~ behavior indicating how to change a value of a ~~first~~ parameter of the first object over time; animating the first object by changing the value of the ~~first~~ parameter of the first object over time according to the specified behavior; and outputting the animated object;

wherein the ~~first~~ behavior comprises a Spring behavior, which changes a position of the first object based on a position of a second object such that the first object moves back and forth around the second object.

91. (Cancelled)

92. (Currently Amended) In a computer-implemented animation system, a method for animating a text object, the method comprising:

receiving ~~a first~~ an input, the ~~first~~ input specifying a ~~first~~ behavior, the ~~first~~ behavior indicating how to change a value of a ~~first~~ parameter of the text object over time; animating the object by changing the value of the ~~first~~ parameter of the text object over time according to the specified behavior; and outputting the animated text object;

wherein the ~~first~~ behavior comprises ~~one from a group consisting of:~~

a Randomize behavior, which incrementally displays the text object character-by-character, wherein character order is random; ~~and~~

~~a Type On behavior, which incrementally displays the text object character-by-character, wherein character order is left-to-right.~~

93. (Cancelled)

94. (New) In a computer-implemented animation system, a method for animating an object, the method comprising:

receiving a first user input, the first user input specifying a first parameter of a motion behavior applied to the object;

receiving a second user input, the second user input specifying a first parameter behavior, the first parameter behavior indicating how to change a value of the first parameter over time;

animating the object by changing the value of the first parameter over time according to the first parameter behavior; and

outputting the animated object.

95. (New) The method of claim 94, wherein the first parameter behavior indicates that the value of the first parameter should be averaged over time.

96. (New) The method of claim 94, wherein the first parameter behavior indicates that the value of the first parameter should be changed using a user-specified custom change.

97. (New) The method of claim 94, wherein the first parameter behavior indicates that the value of the first parameter should be negated.

98. (New) The method of claim 94, wherein the first parameter behavior indicates that the value of the first parameter should oscillate over time.

99. (New) The method of claim 94, wherein the first parameter behavior indicates that the value of the first parameter should ramp over time.

100. (New) The method of claim 94, wherein the first parameter behavior indicates that the value of the first parameter should be randomized.

101. (New) The method of claim 94, wherein the first parameter behavior indicates that the value of the first parameter should change over time according to a specified rate.

102. (New) The method of claim 94, wherein the first parameter behavior indicates that changes to the value of the first parameter should be executed in reverse order.

103. (New) The method of claim 94, wherein the first parameter behavior indicates that the value of the first parameter should not change.

104. (New) The method of claim 94, wherein the first parameter behavior indicates that the value of the first parameter should wriggle over time.

105. (New) The method of claim 94, further comprising:

receiving a third input, the third input specifying a parameter keyframe indicating the value for the first parameter at a first point in time;

wherein animating the object comprises changing the value of the first parameter over time according to the first parameter behavior and further according to the specified parameter keyframe.

106. (New) The method of claim 94, further comprising:

receiving a third input, the third input specifying a second parameter behavior, the second parameter behavior indicating how to change a value of the first parameter over time;

wherein animating the object comprises changing the value of the first parameter over time according to the first parameter behavior and further according to the second parameter behavior.

107. (New) The method of claim 94, further comprising:

receiving a third input, the third input specifying a second parameter of the motion behavior applied to the object; and

receiving a fourth input, the fourth input specifying a second parameter behavior, the second parameter behavior indicating how to change a value of the second parameter over time;

wherein animating the object comprises changing the value of the first parameter over time according to the first parameter behavior and changing the value of the second parameter over time according to the second parameter behavior.

108. (New) The method of claim 94, wherein the object comprises a two-dimensional object.

109. (New) The method of claim 94, wherein the object comprises one from a group consisting of:

- an image object;

- a text object; and

- a particle system.

110. (New) The method of claim 94, wherein the motion behavior comprises one from a group consisting of:

- a Fade In/Fade Out behavior;

- a Grow/Shrink behavior;

- a Motion Path behavior;

- a Snap Alignment to Motion behavior;

- a Spin behavior;

- a Throw behavior;

- an Align to Motion behavior;

- an Attracted To behavior;

- an Attractor behavior;

- a Drag behavior;

- a Drift Attracted To behavior;

- a Drift Attractor behavior;

- an Edge Collision behavior;

- a Gravity behavior;
- an Orbit Around behavior;
- a Random Motion behavior;
- a Repel behavior;
- a Repel From behavior;
- a Rotational Drag behavior;
- a Spring behavior;
- a Vortex behavior; and
- a Wind behavior.

111. (New) The method of claim 94, wherein the object comprises a text object, and wherein the motion behavior comprises one from a group consisting of:

- a Crawl Left behavior;
- a Crawl Right behavior;
- a Scroll Up behavior;
- a Scroll Down behavior;
- a Randomize behavior;
- a Sequence behavior;
- a Position behavior;
- a Rotation behavior;
- an Opacity behavior;
- a Scale behavior;
- a Tracking behavior; and
- a Type On behavior.